

Remarks

The Abstract of the Disclosure has been rewritten and is now believed to be a concise statement of the technical disclosure.

Claims 3, 9, 11-12, 17 and 21 have been canceled. Claims 1-2, 4-8, 10, 13-16 and 18-20 remain.

All claims 1-21 remain rejected under 35 U.S.C. §103(a) as being unpatentable over US 6,516,000 B1 (Kshirsagar *et al.*) in view of US 6,295,276 B1 (Datta *et al.*).

The invention was summarized and distinguished over Kshirsagar *et al.* and Datta *et al.* in the Amendment filed May 31, 2007. However, as the Examiner correctly pointed out in his "Response to Arguments" section of this most recent Office Action, although the Applicant pointed out certain features not shown by the references, these features were not adequately recited in the claims.

Independent claims 1 and 14 have been amended and now recite features of the invention not shown or suggested by Kshirsagar *et al.* or Datta *et al.*, either alone or in combination.

Amended independent claim 1 now requires, for a data packet originating from outside the PLC LAN for bridging onto the PLC LAN, "*replacing* the source MAC address and destination MAC address in the MAC header" with a "ConnectionID, the ConnectionID identifying the PLC MAC bridging device's TEI and the PLC destination station's TEI", and then "transmitting said packet with said ConnectionID from the PLC MAC bridging device to the PLC destination station".

Amended dependent claim 2 further requires, for a data packet originating from within the PLC LAN for bridging onto the non-PLC LAN, "*replacing* the ConnectionID in the MAC header with the source MAC address and destination MAC address for a non-PLC destination station", and then "transmitting said packet with said source and destination MAC addresses from the PLC MAC bridging device to the non-PLC destination station".

Amended independent claim 14 now requires "*modifying*" a "first bridged packet *from a non-PLC source station*" by "*replacing* the 48-bit MAC addresses of the non-PLC MAC header with a ConnectionID containing the TEI of the PLC destination station" and

“*modifying*” a “second bridged packet *from a PLC source station*” by “*replacing* the ConnectionID of the PLC MAC header with the 48-bit MAC address of the non-PLC destination station”.

The above-quoted and italicized features of Applicant’s invention are not shown or suggested by Kshirsagar *et al.* or Datta *et al.*, either alone or in combination.

Applicant believes all remaining claims are in condition for allowance. The Examiner may call Applicant’s attorney if a telephone conference will expedite the prosecution of this application.

Respectfully submitted,

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